To: DeYoung, Robyn[DeYoung.Robyn@epa.gov]; Mulholland,

Denise[Mulholland.Denise@epa.gov]

Cc: Patrick Luckow[PLuckow@synapse-energy.com]; Sarah Jackson[sjackson@synapse-

energy.com]

From: Jeremy Fisher

Sent: Fri 6/19/2015 2:54:15 PM

Subject: State demonstration TSD checklist, sorted template Checklist Requirements from State Plans 6-19-2015.xlsx

Robyn and Denise,

I wanted to give a closer eye to the checklist, and firm up the question marks. There are three new tabs in the attached checklist.

Cheatsheet: a verified full list, with duplicates as shown on pages of the preamble. Marked w/rate/mass and ES/SM, also marked for "used in performance demonstration" and "model input/output/either"

Cheatsheet-sorted: Suggested sort for clarity

Cheatsheet-short: consolidated common factors across rate/mass ES/SM. There are still a lot of inconsistencies in the preamble itself.

In general:	
•□□□□□□□ Red markings are unknowns by me. Not clear if a statement is meant to apply trate or mass specifically, or the actual phrase in the preamble is super ambiguous and could really use some clarity.	to
• • • • Projected CO2 Performance Demonstration" is if a factor is key as part of the actual analysis that gets performed. Not just something that needs to be in the plan somewhe but actually used in analysis.	
• Demonstration Input/Output" is a general guide on if the metrics are an input an output of modeling, or either. Depending on the type of model used, a whole bunch of the factors could be legitimately considered outputs, and inevitably even inputs of some form are outputs of a different model somewhere else. So its sort of a tricky question. Also, some thin like retirements or fuel switching could be the output of an economic model, or an input from utility or stakeholder perspectives. Also ambiguous. So I'm stating "either" for some of those	ese e ngs n

Next steps:

• LULULU I think that there are a number of places where inconsistencies need to be ironed
out. Happy to help.
• • • • • • Maybe this table should be sorted into recommended steps associated with the
actual TSD and marked as "required under preamble", or "recommended in TSD." Because the
preamble doesn't cover everything that you'd want (and sometimes maybe too much), but alone
the cheatsheet doesn't quite get the whole story across right now.

Jeremy Fisher, PhD

Principal Consultant

Synapse Energy Economics

485 Massachusetts Ave., Suite 2

Cambridge, MA 02139

617.453.7045 (Direct)

617.661.3248 (Synapse Main)

617.661.0599 (Fax)